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ABSTRACT

An attempt to increase adoption of the Community Lodge program through the use of a site visit was investigated. The sample of 24 state mental hospitals agreed to have a workshop about the Lodge. At the conclusion of the workshop, 12 of the hospitals were told they would have the opportunity to send one staff member on an expense-paid site visit, to occur within about one month after the workshop. A cluster analysis indicated that: (1) three months after the workshop, uncertainty was significantly lower among staff at site visit hospitals; (2) program adoption did not increase after one year of follow-up; and (3) both uncertainty and discussion about the program were highly related to movement toward adoption. (Author)

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EFFECTS OF SITE VISITS ON INNOVATION ADOPTION

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EFFECTS OF SITE VISITS ON INNOVATION ADOPTION

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I think it is safe to say that nearly everyone has heard the proverbs, "seeing is believing", and "a picture is worth a thousand words". Certainly there is an element of truth to these sayings. When people use such proverbs, they implicitly mean, "Don't tell me about it, let me see it for myself." All of the research presented so far in this panel has focused on "telling them about it". The study I will be describing took another approach to the diffusion of the Community Lodge, that of letting them "see it for themselves".

As was mentioned, one of the major problems for public bureaucracies such as mental hospitals is the fact that they are not organized in a way that enables them to adopt innovations easily. Bureaucracies do not have the mechanisms for dealing with the uncertainty involved when the prospect of adopting an innovation looms near. As a variety of contingency theorists have noted over the past 20 years, heavily bureaucratized organizations have developed rigid sets of rules and hierarchies that are well suited for stable environments and routine tasks, but that are difficult to change or to apply to unstable environments and non-routine tasks. One approach to this problem is to directly attempt to change the structure and system of relations within the organization in order to make it more open to change. This is the Organization Development approach that was described earlier in this symposium.

There is another approach, that of trying to reduce uncertainty in some other fashion. March and Simon (1958) define uncertainty in terms of knowledge about alternatives. They state that an alternative is uncertain if one lacks a conception of the probabilities of positive or negative outcomes that might

arise from the implementation of the alternative. The probabilities are unknown because either the outcomes, or the utility of the outcomes, is unknown. Consequently, it would seem that one way to reduce uncertainty about an innovation would be to provide more knowledge about it. However, it is clearly not enough to simply hand people information about an innovation. The earlier Fairweather, Sanders, and Tornatzky (1974) study of the effect of a do-it-yourself manual showed that information alone, provided either in written form or by an outside consultant, does not produce very much change.

One technique that could provide a different quality of information, would involve sending prospective adopters to visit the site of an ongoing innovative program. This technique would have a number of advantages, not the least of which would be the opportunity for the visitor to interact, on an informal basis, with a number of his or her peers who are actually operating the program which is the focus of the decision. The staff of such a program should be perceived as having more legitimacy and expertise than a university consultant. Much of what might happen in this setting is akin to a social comparison process, in which the visitor would come to perceive that establishing the innovation is, in fact, possible.

An important point to be made here is that an innovation such as the Community Lodge must be adopted by an organization, or by a group within an organization, rather than by an individual. A site visit should be particularly advantageous in an organizational setting, and a site visitor could return home to beome an advocate for the program. Because of the visitor's linkages to the hospital and its culture, he or she should be a more credible change agent than an outside consultant. Theoretically, an informal group might form around the visitor, providing the nucleus for an adopting unit.

While the notion of a site vi_ t makes good theoretical sense, and good common sense as well, there have been relatively few empirical tests of its effectiveness in promoting innovation. The few tests that have been conducted have either had little relevance to the problem at hand, or have been inconclusive as to their results.

Probably the most widespread use of the site visit technique is in agricultural extension work, involving the use of a demonstration farm. When one farmer in an area has been convinced tc pilot a new product or technique, other farmers are given the opportunity to visit the demonstration farm and talk with the farmer. This is recognized as a very effective technique, although its applicability beyond the agricultural setting is difficult to determine. Of particular relevance is the fact that agricultural extension work has typically dealt with individual farmers, rather than with anything similar to a cumbersome service bureaucracy.

Malcolm Richland (1965) has tested the use of site visits, or in his words, "traveling seminars", in the area of education. The "seminars" were made up of groups of educators who traveled to different schools that had set up exemplary programs. His follow-up a year later found that school systems involved in the visits had adopted more innovations during that year than had schools in a control group. However, Richland was not attempting to influence his educators to adopt a specific innovation; his purpose was to make them "more innovative" in a general sense.

Edward Glaser, of the Human Interaction Research Institute, has also done some work in this area. In one study (Glaser & Ross, 1971) he tried to persuade Community Mental Health Centers to adopt a specific treatment program by means of

a site visit arrangement. Unfortunately, no adoption of the program took place, rendering the results inconclusive. Other researchers have tried the technique, but, except for Richland's study, the results have been weak at best. Consequently, it seems as if the technique has considerable theoretical backing, but little empirical support.

In this study, a number of hypotheses as to the effect a site visit ought to have on a mental hospital and its staff were derived. These are divided into three categories.

The first set of hypotheses amounts to a manipulation check. If the site visit is to have any effect, people at the hospital must talk to the site visitor, who must become an advocate. Thus, the first two hypotheses were:

1. The site visit would increase the amount of <u>discussion</u> about the Lodge program among hospital staff.
2. As a result of the site visit, there would be an increase in the intensity of <u>communication</u> with the sociometric star in the hospital.

I have suggested that reduction of uncertainty about the innovation may be an intervening variable between discussion of an innovation and its actual adoption. This yielded a number of intervening variable hypotheses:

3. A site visit would reduce the amount of uncertainty staff felt concerning the effectiveness of the Lodge.
4. A site visit would reduce the amount of uncertainty staff felt concerning the feasibility of the Lodge.
5. A site visit would reduce the amount of uncertainty staff felt concerning their knowledge about how to set up the Lodge.

Finally, there were two hypotheses more directly related to change and innovation adoption:

6. A site visit would improve staff attitudes toward the Lodge.
7. A site visit would result in greater movement toward adoption of the Lodge.

Method

What follows is a description of the experiment that was performed to test these hypotheses. Basically, the study involved a comparison of one group of hospitals, that sent staff on a site visit, with a control group of hospitals, whose staff did not make a site visit.

Sample

The sample consisted of 24 state hospitals in the northeast quarter of the United States. They were chosen because they were omitted from the sample of 108 in the study described by Fergus (1978), and because they were within approximately 1000 miles of East Lansing, Michigan. Of the 44 hospitals which were called and offered an initial workshop on the Lodge, 24 agreed to: 1) have the workshop; and 2) send a staff member on an expense-paid trip to visit a Lodge, should that opportunity be made available. In effect, all hospitals were volunteers for both cells. Since information about these hospitals' previous willingness to change was available, they were matched on the basis of that change score, and then randomly assigned to the site visit and control conditions (Figure 1).

Insert Figure 1 about here

Procedure

The study had four phases: approach, persuasion, site visit, and follow-up.

In the approach phase, a letter and two brochures describing the program were sent to the hospital superintendent. The letter said that a call would be

made to offer free consultation assistance in setting up the program. At the time of the call, I described our project, and asked if the hospital would like to receive a workshop. Often a decision was made immediately; sometimes it took a few weeks.

The workshop was the persuasion phase of the study. This lasted one day, and was open to interested hospital staff and representatives of community agencies. A total of 609 individuals attended the workshops at all 24 hospitals. The workshop had two parts, a morning session and an afternoon session. The morning session consisted of a two-hour talk, complete with movie and slide presentation, and a question-answer period. After the question-answer period, there was some discussion about the kinds of assistance we could provide to the hospital. These included written materials, which were handed out at the end of the day; free telephone consultation; and free consultation visits to the hospital, if a ward program was set up and operated for at least 60 days. Those hospitals in the site visit condition were also offered a free site visit to a hospital with a Lodge. The afternoon session consisted of an extended discussion about the mechanics of setting up a small group ward. At the conclusion of that discussion, the participants were asked to fill out a pre-test questionnaire. Also at the end of the workshop, groups in the site visit condition were asked to choose someone to make the visit. In about half the cases, a decision was made immediately; in the rest, it was made within two weeks.

The third phase was the site visit. Obviously, there was no activity in this phase for the control group. In the site visit group, one member of the hospital staff was sent on an all-expenses-paid visit to an exemplary Lodge program in Minnesota. The initial Lodge there had been set up eight years ago, and five additional Lodges had been set up since then. They were an enthusiastic

group of staff, and were quick to accept the idea of hosting the site visits. A schedule was prepared for the visits and was followed quite closely. Three to six visitors from different hospitals participated in each of three visits.

During a typical two-day site visit, the visitors had the opportunity to meet with staff from the small group ward and Lodge programs, to see and meet with patients and residents of the programs, to attend the various meetings, to visit Lodge residences, and to watch Lodge members at work in their places of business. Before the visitors left for home, they filled out a brief questionnaire, which included questions on the similarity of the hospital in Minnesota with their home institution, and on their feelings about the visit itself.

In the final, follow-up phase, three months after the workshop, all participants in both experimental and control conditions were mailed a questionnaire, 365 of which were returned. At three, six, nine, and thirteen months after the workshop, our contact at the hospital was called and asked a series of questions having to do with implementation of the program.

One final point has to do with implementation. While hospitals were offered the possibility of receiving additional consultation visits, this in fact was never done, nor needed, until the nine month follow-up had passed.

Results

In terms of measurement, there were five scales used on the pre- and post-tests. The reliabilities of the scales ranged from .56 to .88.

I would now like to discuss the results of the experiment, and will begin by examining whether the site visit had any effect on the communication patterns within the hospital. These data come from a communication question which was structured in a matrix format, in which each respondent indicated the amount of

communication concerning the Lodge that he or she had with every other respondent. The data show that there was no difference between conditions ($F = 2.30$; $df = 1, 22$; ns) in the amount of communication about the program.

The next step was to determine each hospital's sociometric star, defined as the person with the greatest number of incoming links from other people, on the communication question. The star has marginally stronger communication in the site visit condition than in the control condition ($F = 3.49$; $df = 1, 22$; $p < .10$). This indicates that the visit probably had some kind of impact on communication within the organization, and that greater advocacy may have been taking place.

Now let us look at the effect of the manipulation on the intervening variables. The first such variable was the staff's certainty about their "how-to" knowledge concerning the program. This involved questions such as "How certain are you that you know enough about the Lodge to be able to set one up?" I should note that while this is a simple two-cell design, it is also nested, hospitals within conditions. It is therefore necessary to consider the variance due to hospitals separately. The site visit did have a significant effect on staff's uncertainty concerning their knowledge about how to set up the program ($F = 6.25$; $df = 1, 322$, $p < .05$). There was no effect for the site visit on staff's uncertainty concerning the effectiveness of the Lodge, nor was there an effect on their uncertainty about the feasibility of the Lodge. The overall uncertainty scale, which is a combination of the three previous scales, was considered next. The site visit had a marginal effect on overall uncertainty ($F = 3.23$; $df = 1, 22$; $p < .10$). However, the significant hospital effects overwhelm the treatment effects in this case ($F = 1.59$; $df = 22, 303$; $p < .05$).

The next test was for the effect of the manipulation on staff's attitudes

towards the Lodge. There was no effect. Finally, we come to the effect of the visit on the actual adoption of the program. Adoption of the program was measured by a 33 point checklist that approximately corresponds to the steps necessary to set up a small group ward and Lodge. Figure 2 shows the mean adoption score for the two conditions over time. ANOVA shows that there was a marginal difference between the two conditions, suggesting that the site visit may have enhanced adoption of the program ($F = 2.86$; $df = 1, 22$; $p < .11$).

Insert Figure 2 about here

One additional analysis should be noted. A cluster analysis was performed with these data using the BCTRY Program (Tryon & Bailey, 1970). The results of that analysis showed that the scales and items from the post-test questionnaire reduced to two clusters. These were a discussion cluster and a certainty-attitude cluster, which accounted for an overwhelming proportion of the variance. The certainty-attitude cluster could be considered to represent some kind of cognitive dimension concerning the Lodge. The solution is not orthogonal, and the clusters are related with a correlation of approximately .4. One feature of the BCTRY program is its ability to develop typologies based on standardized cluster scores. This kind of analysis is known as Cluster Analysis of Objects, or O-Analysis. The results (Figure 3) indicate that there were four organizational types based on the two clusters, as follows:

1. Org.-Type 1 - average certainty and very low discussion;
2. Org.-Type 2 - moderate (just above average) certainty and moderate discussion;
3. Org.-Type 3 - moderate to high certainty and high discussion; and
4. Org.-Type 4 - very low certainty and low discussion.

Insert Figure 3 about here

As can be seen in Figure 4, O-Types 1 and 4, which were low on either discussion or certainty, had almost no movement toward adoption of the program; O-Type 2, which was moderate on both dimensions, had some movement toward adoption; and O-Type 3, which was high on both, had quite a bit of movement toward adoption. This shows that, as was suggested earlier, both certainty and discussion are related to change. Equally important here is the fact that both a high level of certainty and a high level of discussion seem to be necessary for adoption to take place. However, while they seem to be necessary, they are by no means sufficient to cause change. There were hospitals in both O-Types 2 and 3 that accomplished nothing in terms of adoption.

Insert Figure 4 about here

Discussion

I will now try to summarize the results of this study, and place it in perspective, given the results described by the previous panel members. Probably the clearest result of this study is that the site visit reduced staff uncertainty about the Community Lodge. This effect was particularly pronounced for their uncertainty about how to set up the program. Thus, the visit may have been perceived more as a "how-to-do-it" lesson than as a means of providing evidence for the effectiveness or feasibility of the Lodge.

The site visit also had a marginal impact on advocacy of the program. In a sense it could be said that the site visit had some effect on organizational behavior and process in this case. The site visit also had a marginal effect on adoption of the Lodge program. What can we make of these consistent, but

marginal, effects? One possible explanation could have to do with sample size. With a sample of only 24 it is relatively difficult to achieve significant results in any experiment. Another explanation could have to do with the relative weakness of the intervention itself.

It is possible that the intervention could be strengthened in a number of ways. More staff members could be sent, the visit could be lengthened, or some kind of matching process could take place so that the organizations visited are as similar as possible to the visitors' organizations. Another way of viewing the problem could be to look at the context in which a site visit is placed. The time at which the site visit occurs in the adoption process could make a difference. In addition, the order of interventions could be of importance. For example, a site visit might be more effective if consultation were provided immediately after the visit took place, thereby reinforcing its content. On the other hand, the whole process might have a greater impact if the site visit were provided subsequent to such a consultation visit.

The O-Analysis provides some valuable insight into the problem of context. The O-Analysis indicated that increased discussion and reduced uncertainty were necessary, but not sufficient conditions for change. This indicates that there are other factors that are important for adoption to occur.

Consider the evidence provided by Fergus (1978) that participation in decision making led to increased adoption. It would seem to be a fruitful tactic to combine a site visit, which would not be expected to affect participation, with an intervention that does affect it, such as the high group enhancement intervention described by Fergus (1978) or the organization development intervention described by Avellar (1978).

An additional factor to be considered is that of individual hospital dif-

ferences. As noted in this paper and the previous ones, there were significant hospital differences on a number of variables. If it were possible to systematize these differences (Downs & Mohr, 1976), one might be able to match one's change tactics to organizational type, thereby enhancing the effectiveness of the tactics.

In conclusion, it can be said that a visit to the site of an innovative program combined with only minimal consultation assistance, is only minimally effective. What is clearly needed is further experimental research to determine if strengthening the intervention makes it more powerful, and to determine if altering the context and other kinds of assistance provided increases the effectiveness of the technique. Such research needs to be experimental in design and complex in nature in order to sort out the effects of a great diversity of variables.

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Site Visit Hospitals	Control Hospitals
n = 12	n = 12

Figure 1. Design of Site Visit Experiment

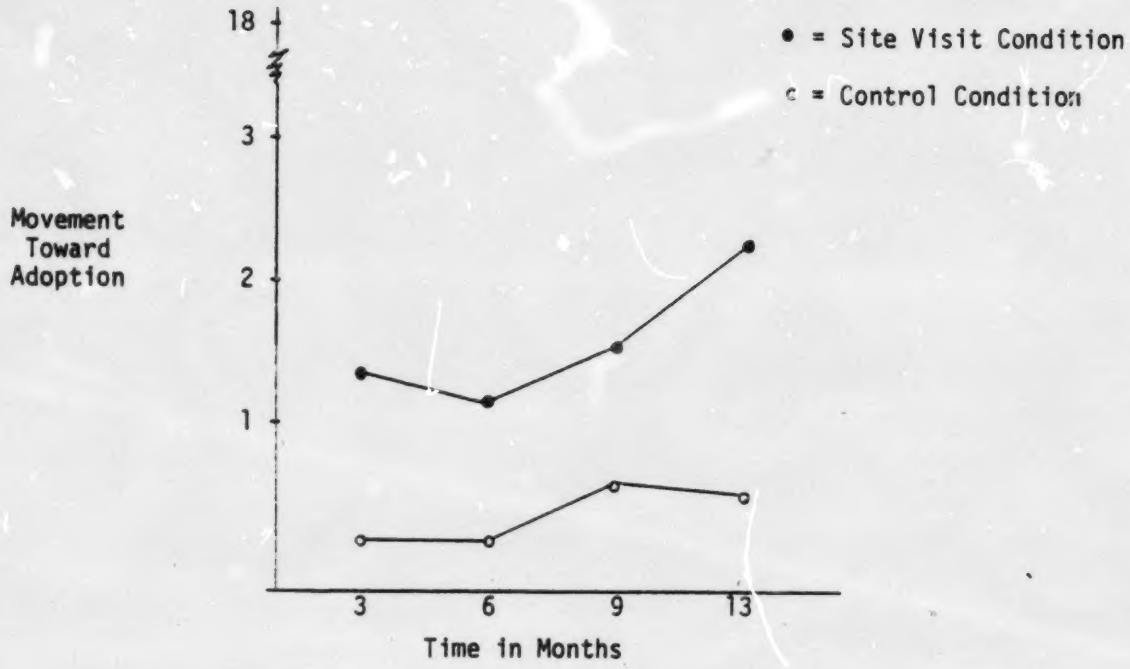

Figure 2. Movement Toward Adoption by Condition over Time

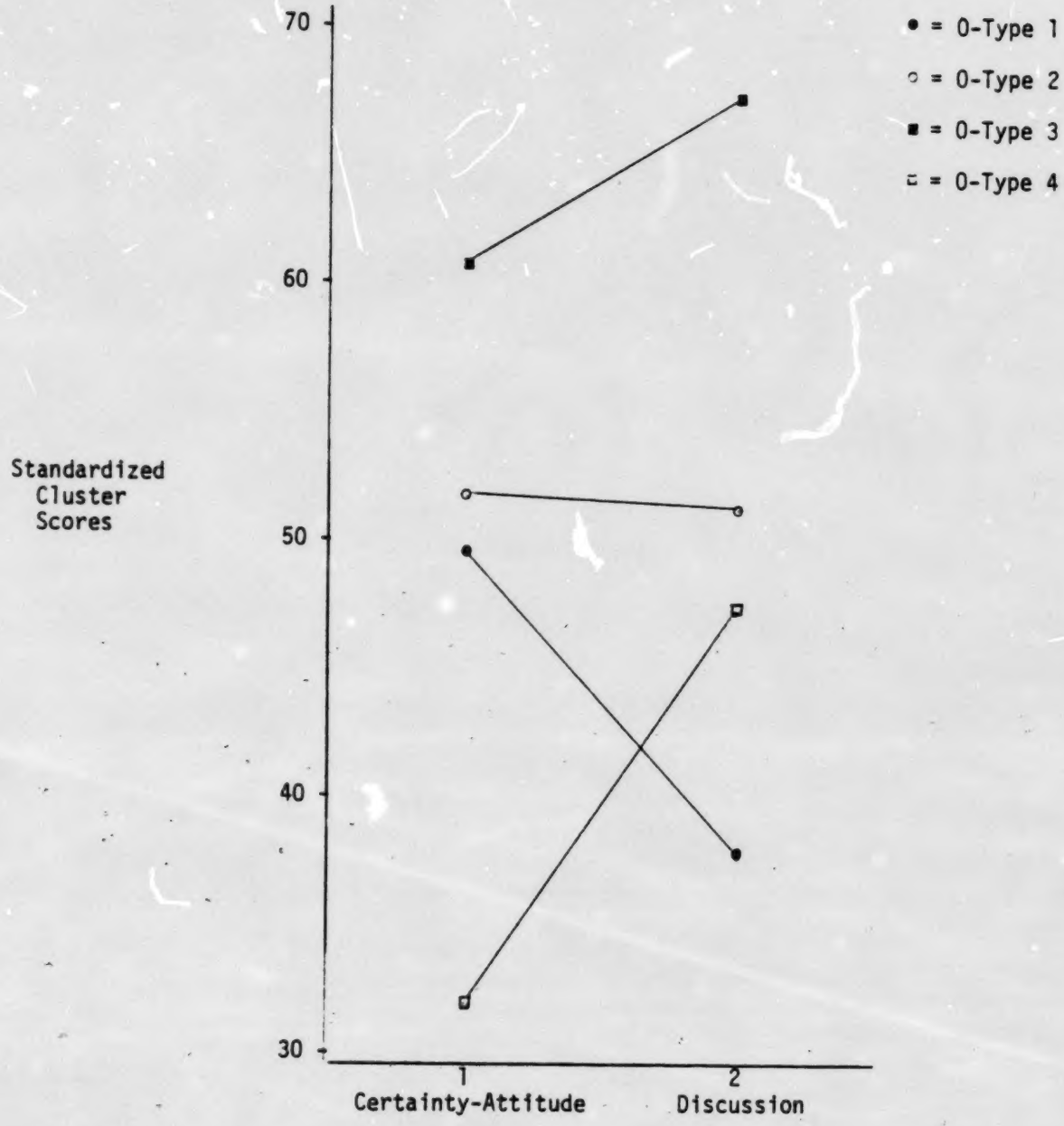

Figure 3. Cluster Scores of O-Types

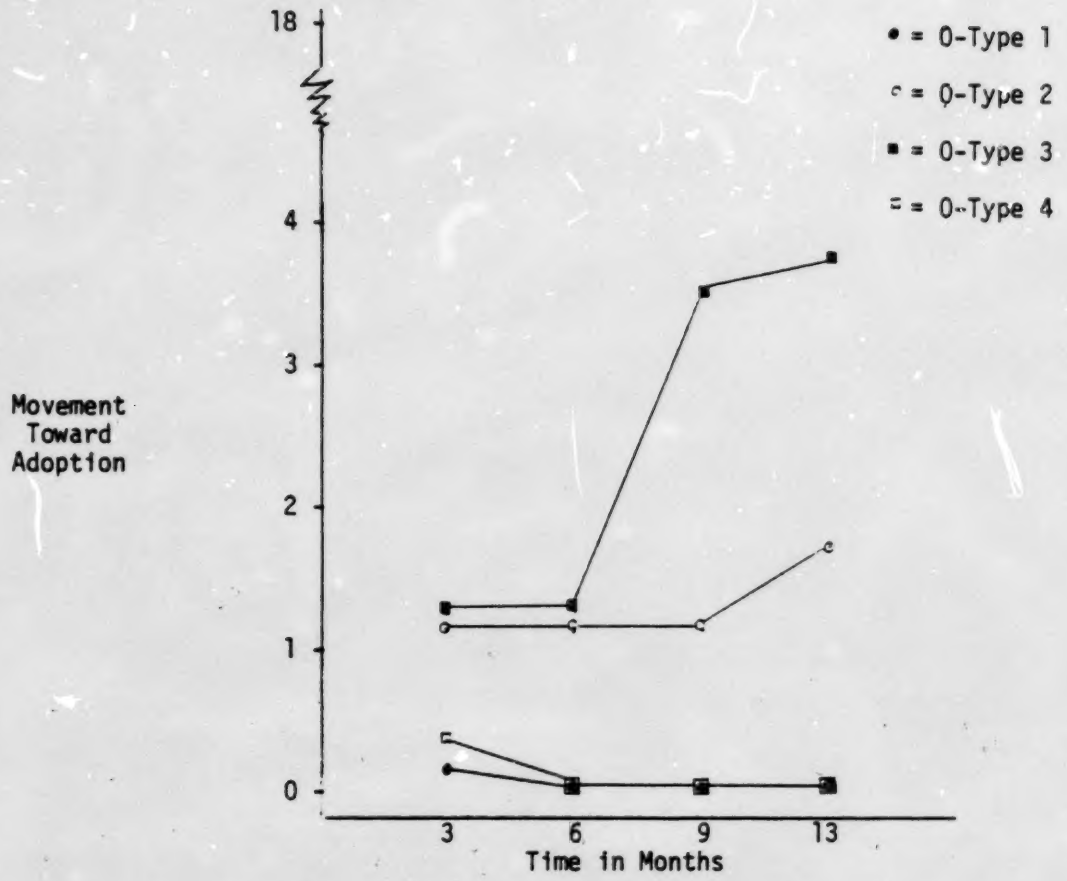

Figure 4. Movement Toward Adoption by O-Type Over Time